Use the information located at:

<http://science.howstuffworks.com/environmental/energy/solar-cell.htm>

to answer the following questions.

Introduction to How Solar Cells Work

1. The hope for a "**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**" has been floating around for decades -- the idea that one day we'll all use free electricity fro­m the [sun](http://science.howstuffworks.com/sun.htm). This is a seductive promise, because on a bright, sunny day, the sun's rays

give off approximately **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** watts of energy per square meter of the planet's surface. If we could collect all of that energy, we could easily power

our homes and offices for **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

1. What is the purpose of the article?

**Photovoltaic Cells: Converting Photons to Electrons**

1. The solar cells that you see on calculators and satellites are also called

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (PV) cells, which as the name implies (photo meaning "light" and voltaic meaning "electricity"), convert sunlight directly into electricity.

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a group of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_connected electrically and

packaged into a frame (more commonly known as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_), which

can then be grouped into larger solar \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, like the one operating at Nellis Air Force Base in Nevada.